

ABSTRACT

Glycosaminoglycans derived from K5 polysaccharide having high anticoagulant and antithrombotic activity and useful for the control of coagulation and as antithrombotic agents are obtained starting from an optionally purified K5 polysaccharide by a process comprising the steps of N-deacetylation/N-sulfation, C5 epimerization, O-oversulfation, selective O-desulfation, 6-O-sulfation, N-sulfation, and optional depolymerization, in which said epimerization is performed with the use of the enzyme glucuronosyl C5 epimerase in solution or in immobilized form in the presence of divalent cations. New, particularly interesting antithrombin compounds are obtained by controlling the reaction time in the selective O-desulfation step and submitting the product obtained at the end of the final N-sulfation step to depolymerization.

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